

REMARKS

Claims 1-12 remain pending in the application. Claims 1-12 are rejected over cited prior art references. Applicant respectfully traverses the rejections and requests reconsideration and allowance of all pending claims.

Discussion of Amendments to the Figures

The Examiner objected to the drawings for including the same reference designator, 250, to identify both the “CLK” and “DMA CONTROLLER” of FIG. 3. Applicant amends FIG. 3 to correct the identification of “DMA CONTROLLER.” In particular, the reference designator associated with the “DMA CONTROLLER” is amended to be --260--.

Applicant attaches a marked-up copy of the drawing sheet illustrating the change as well as a Replacement Sheet having the change incorporated therein. Applicant respectfully requests withdrawal of the objection to the drawings.

Discussion of Amendments to the Specification

The Examiner also objected to the drawings for failing to include reference designator “260” mentioned in the description, at page 7, paragraph [0030].

Applicant has amended the drawings to include reference designator “260” as described above in relation to the amendments to the drawings. Additionally, Applicant amends paragraph [0030] to append the term --Controller-- to the “DMA/microprocessor memory interface **260**” such that the term reads “DMA Controller/microprocessor memory interface **260**.” The term “Controller” is added to make the detailed description align with the nomenclature used in the drawing sheets. No new matter is added with the change.

Applicant respectfully requests withdrawal of any remaining objection to the drawings in light of the amendment to the Specification.

Discussion of Rejections Under 35 U.S.C. §102

Claims 1-3 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,754,509 to Khan et al. (hereinafter Khan).

In order for a claim to be anticipated by a reference, the single prior art reference must describe, either expressly or inherently, each and every element as set forth in the claim.

Applicant traverses the rejections under 35 U.S.C. §102(e), because Khan fails to describe every claimed feature.

Claim 1 recites a system for partitioning and loading data. The system includes a general computing subsystem, a modem computing subsystem, a clock, and shared memory. Furthermore, claim 1 recites “the general computing subsystem selectively activates the clock to the shared memory module to permit use of the shared memory module by the modem computing subsystem.” Kahn fails to teach at least this claimed feature.

The Examiner contends that Kahn, at Col. 4, line 54 - Col. 5, line 53, describes the claimed feature. *See, Office Action*, at page 4. However, the cited portion of Kahn describes different clock regimes of the architecture. Kahn describes a modem clock regime, a PDA clock regime, and a shared memory clock regime.

Kahn fails to describe the condition of the PDA clock activating a clock when the modem uses the shared memory. Kahn fails to describe the general computing subsystem selectively activating a clock to permit use of the shared memory module by the modem computing subsystem.

In contrast, Kahn explicitly describes a distinct clock controller that is used to generate clock signals for the shared memory. Kahn states: “A clock controller 172 generates the clock signals within the shared memory clock regime (i.e. the SMEM_BCLK regime), and in particular generates a shared memory clock signal (smem_clk) for driving shared memory 106.” *Kahn*, at Col. 7, ll. 36-39. The distinct clock controller generates the clock for the shared memory. Kahn fails to describe a situation in which the clock controller is controlled by one of the processor subsystems to permit the other processor subsystem to use the shared memory.

Kahn fails to describe every claimed feature because Kahn describes an independent clock controller for the shared memory and fails to describe “the general computing subsystem selectively activates the clock to the shared memory module to permit use of the shared memory module by the modem computing subsystem” as claimed. Applicant respectfully requests reconsideration of claim 1 and withdrawal of the rejection based on Kahn.

Claims 2-3 depend from claim 1 and are believed to be allowable over Kahn at least for the reason that they depend from an allowable base claim. Applicant respectfully requests reconsideration and allowance of claims 2 and 3.

Discussion of Rejections Under 35 U.S.C. §103

Claims 1-12 were rejected as allegedly unpatentable under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 20030008690 to Guterman et al. (hereinafter Guterman) in view of U.S. Patent No. 6,161,162 to DeRoo et al. (hereinafter DeRoo).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference, or references when combined, must teach or suggest all of the claim limitations.

Claim 1 recites a system for partitioning and loading data. The system includes a general computing subsystem, a modem computing subsystem, a clock, and shared memory. Furthermore, claim 1 features “the general computing subsystem selectively activates the clock to the shared memory module to permit use of the shared memory module by the modem computing subsystem.” The combination of Guterman with DeRoo fails to describe at least this claimed feature.

The Examiner concedes that Guterman fails to describe “the general computing subsystem selectively activates the clock to the shared memory module to permit use of the shared memory module by the modem computing subsystem,” but contends DeRoo teaches the missing element at Col. 81, line 37 through Col. 84, line 46.

However, DeRoo fails to teach selectively activating a clock to a shared memory module. Fig. 20 of DeRoo fails to show any control of a clock signal by a first processor subsystem, for example SCP, to permit use of shared memory by a second processor subsystem, such as the CPU. Fig. 20 of DeRoo fails to even show a clock signal that is coupled to the common memory device 704. Furthermore, Fig. 23 of DeRoo illustrates the control of the common memory interface and fails to illustrate any control of a clock signal by a first processor subsystem, for example SCP, to permit use of shared memory by a second processor subsystem, such as the CPU. DeRoo fails to describe any of the control signals as clocks for the shared memory, and fails to describe a situation in which one processor subsystem operates to control the permission of the other processor subsystem.

The timing diagram of DeRoo, Fig 24 fails to illustrate a control line from the SCP selectively activating a signal that is described as a clock for the shared memory. The portions of DeRoo cited by the Examiner describe access of the shared memory, but fail to teach or suggest any example in which “the general computing subsystem selectively activates the clock to the shared memory module to permit use of the shared memory module by the modem computing subsystem.”

Thus, claim 1 is believed to be allowable because the cited references, Guterman and DeRoo, either alone or in combination, fail to teach or suggest every claimed limitation. Applicant respectfully request reconsideration and allowance of claim 1.

Claim 7 recites a portable wireless communication device. The device includes nonvolatile memory, a general computing subsystem, a modem computing subsystem, and first shared memory. Additionally, claim 7 features “a first binary image is loaded in the first shared memory module from the nonvolatile memory by the general computing subsystem when selectively enabled.” The cited references fail to teach or suggest at least this claimed feature.

The Examiner concedes that Guterman fails to teach nonvolatile memory and fails to teach the claimed feature cited above. *See, Office Action*, at page 8. However, the Examiner contends that “DeRoo discloses a general computing subsystem comprising a nonvolatile memory that stores information for generating data, (col. 1, lines 36-63). DeRoo also teaches a general computing subsystem selectively enabling or disabling a shared memory module to permit use of the shared memory module by an alternate computing subsystem, (col. 81, line 37-col. 84, line 46.” *Office Action*, at page 8.

The Examiner fails to identify any portion of either Guterman or DeRoo that teaches or suggests “a first binary image is loaded in the first shared memory module from the nonvolatile memory by the general computing subsystem when selectively enabled,” as claimed. The Examiner fails to identify any portion of either Guterman or DeRoo that teaches or suggests loading information from nonvolatile memory into shared memory.

The Examiner fails to provide any reasons that would motivate one of ordinary skill to load an image from nonvolatile memory into shared memory. The Examiner provides as a motivation “an efficient means for accessing a single memory.” *Office Action*, at page 9. However, the Examiner fails to provide any relationship between the alleged motivation and the

claimed feature of “a first binary image is loaded in the first shared memory module from the nonvolatile memory by the general computing subsystem when selectively enabled.”

Therefore, claim 7 is believed to be allowable because the Examiner fails to cite any reference that teaches or suggests “a first binary image is loaded in the first shared memory module from the nonvolatile memory by the general computing subsystem when selectively enabled,” and fails to provide any motivation for modifying the cited references in a manner that would result in the claimed invention. Applicant respectfully requests reconsideration and allowance of claim 7.

Claims 2-6 and 8-12 depend, either directly or indirectly from one of claims 1 or 7 and are believed to be allowable at least for the reason that they depend from an allowable base claim. Applicant respectfully requests reconsideration and allowance of claims 2-6 and 8-12.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application and all of the claims are in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If there are any fees due in connection with the filing of this response, please charge such fees to our Deposit Account No. 17-0026. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for, such an extension is requested and the fee should also be charged to our Deposit Account. A duplicate copy of this page is enclosed.

Respectfully submitted,

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